



Linux

CPT-201

<http://cpt201.hubner.org/>

Test Review



- Linus Torvaldes

Created the Linux Kernel



- Richard Stallman (RMS)

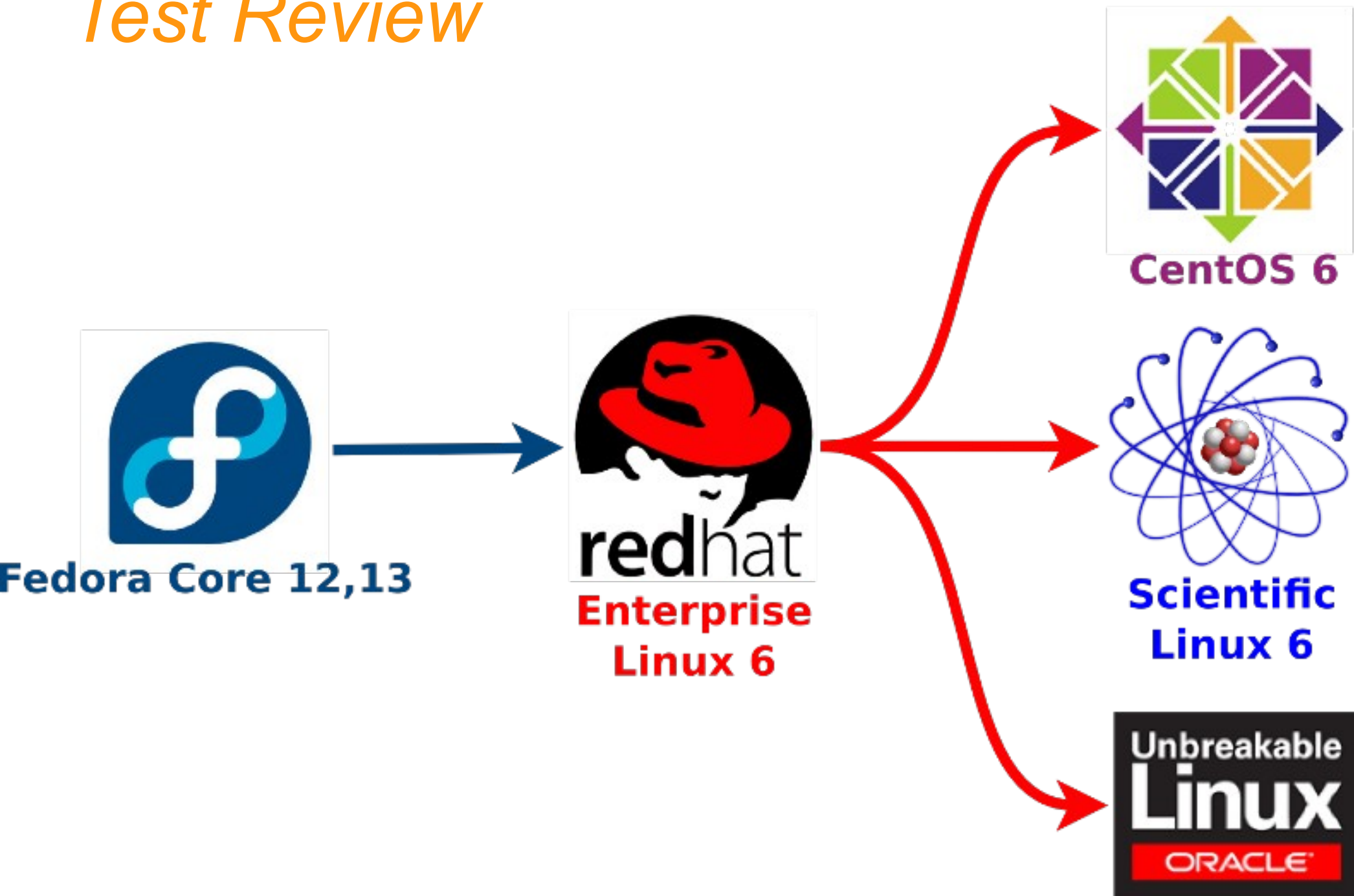
*Created the GNU project,
GPL, and FSF*

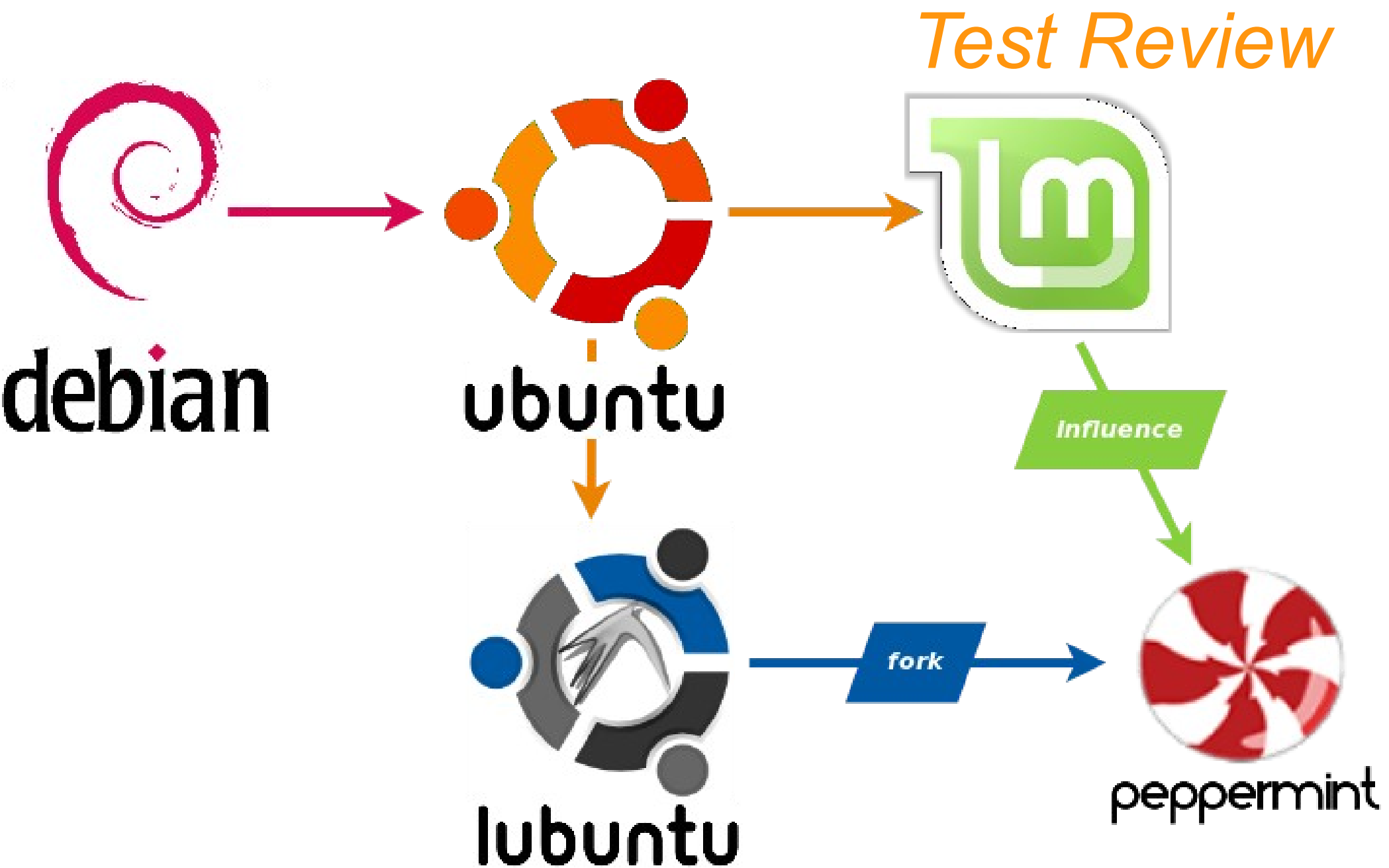


- Mark Shuttleworth

Space, Canonical, Ubuntu SABDFL

Test Review





Ubuntu Releases

Version	Code name	Release date	Supported until	
			Desktop	Server
4.10	Warty Warthog	2004-10-20	2006-04-30	
5.04	Hoary Hedgehog	2005-04-08	2006-10-31	
5.10	Breezy Badger	2005-10-13	2007-04-13	
6.06 LTS	Dapper Drake	2006-06-01	2009-07-14	2011-06-01
6.10	Edgy Eft	2006-10-26	2008-04-25	
7.04	Feisty Fawn	2007-04-19	2008-10-19	
7.10	Gutsy Gibbon	2007-10-18	2009-04-18	
8.04 LTS	Hardy Heron	2008-04-24	2011-05-12	2013-04
8.10	Intrepid Ibex	2008-10-30	2010-04-30	
9.04	Jaunty Jackalope	2009-04-23	2010-10-23	
9.10	Karmic Koala	2009-10-29	2011-04-30	
10.04 LTS	Lucid Lynx	2010-04-29	2013-04	2015-04
10.10	Maverick Meerkat	2010-10-10	2012-04-10	
11.04	Natty Narwhal	2011-04-28	2012-10	
11.10	Oneiric Ocelot	2011-10-13	2013-04	
12.04 LTS	Precise Pangolin	2012-04-26	2017-04	
12.10	Quantal Quetzal	2012-10-18	2014-04	
Color		Meaning		
Red		Release no longer supported		
Green		Release still supported		
Blue		Future release		

Ubuntu for Android



watch video

Test Review

- **Free**

No Money

- **Open**

Source Code Available

- **Proprietary**

Closed Source

- **Commercial**

Sold for Money

- **GPL License**

GPL code, and derived works, must be provided.

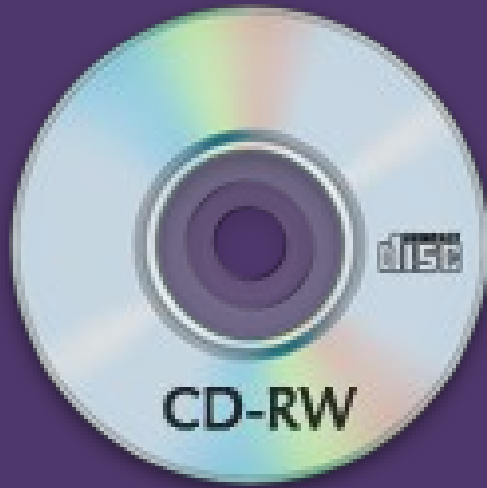
Code must be contributed back.

- **BSD License**

Code does not need to be provided.

*Can be used to create Proprietary software,
Like MacOS X and Sun Solaris.*

Create an ISO of a CD-ROM



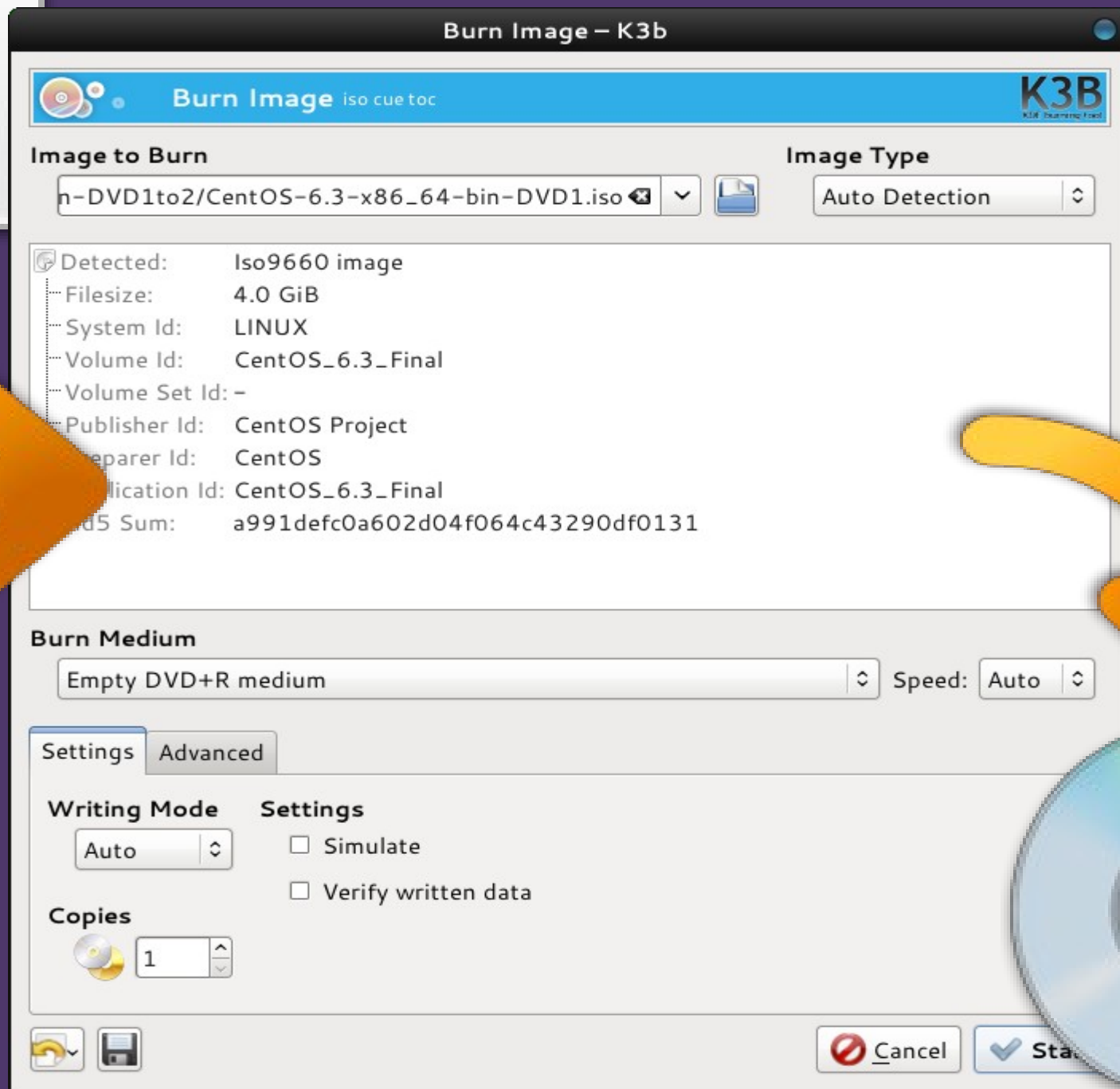
```
dd if=/dev/sr0 of=out.iso
```



ISO

Burn Disk Images

Test Review



Install k3b

- `sudo yum -y install k3b`

Burn an ISO



Finding Help!

- `man <command name>`
- `man dd`
- `man cp`
- `man ls`
- `man head`
- `man tail`
- `man cat`

Unity

Test Review



Tests

- Week 6 - Oct 03 - Test 1 - GNU/Linux, Licensing, RedHat, CentOS, Canonical, Ubuntu, Linus Torvaldes, Richard Stallman, Mark Shuttleworth
- Week 9 - Oct 29 - Test 2 - Linux Commandline
- Week 12 - Nov 14 - Test 3 - System Admin
- Week 15/16 - Dec 5/12 - Final

Practice At Home with a LiveCD

The screenshot displays a LiveCD environment. The top bar shows the system menu with 'Applications', 'Places', and 'System' options, along with the date and time 'Wed Oct 10, 5:32 PM'. The web browser window, titled 'CPT-201 Fall 2012 Main Page - Classes - Iceweasel', shows the URL 'cpt201.hubner.org/wiki/CPT-201_Main_Page'. The page content includes a sidebar with a penguin mascot and a navigation menu, and a main area with the title 'CPT-201 Fall 2012 Main Page' and a redirect notice. A terminal window, titled 'amnesia@amnesia: ~', is open in the foreground, displaying the output of the 'ls' command. The terminal output shows the directory contents, including 'NAME', 'SYNOPSIS', and 'DESCRIPTION' sections.

Applications Places System Wed Oct 10, 5:32 PM

CPT-201 Fall 2012 Main Page - Classes - Iceweasel

File Edit View History Bookmarks Tools Help

CPT-201 Fall 2012 Main Page - C...

cpt201.hubner.org/wiki/CPT-201_Main_Page

Log in / create account

CPT-201

article discussion edit history

CPT-201 Fall 2012 Main Page

(Redirected from CPT-201 Main Page)

CPT-201 Spr 2012 (Li

- Main Page
- Syllabus
- Homework
- Tests
- Help

Search

Go Search

Toolbox

- What links here
- Related changes
- Upload file
- Special pages
- Printable version
- Permanent link

Linux [edit]

- Main Page
- Syllabus
- Homework
- Tests
- Help

amnesia@amnesia: ~

File Edit View Terminal Help

LS(1) User Commands LS(1)

NAME

ls - list directory contents

SYNOPSIS

ls [OPTION]... [FILE]...

DESCRIPTION

List information about the FILES (the current directory by default). Sort entries alphabetically if none of -cftuvSUX nor --sort.

Mandatory arguments to long options are

Manual page ls(1) line 1

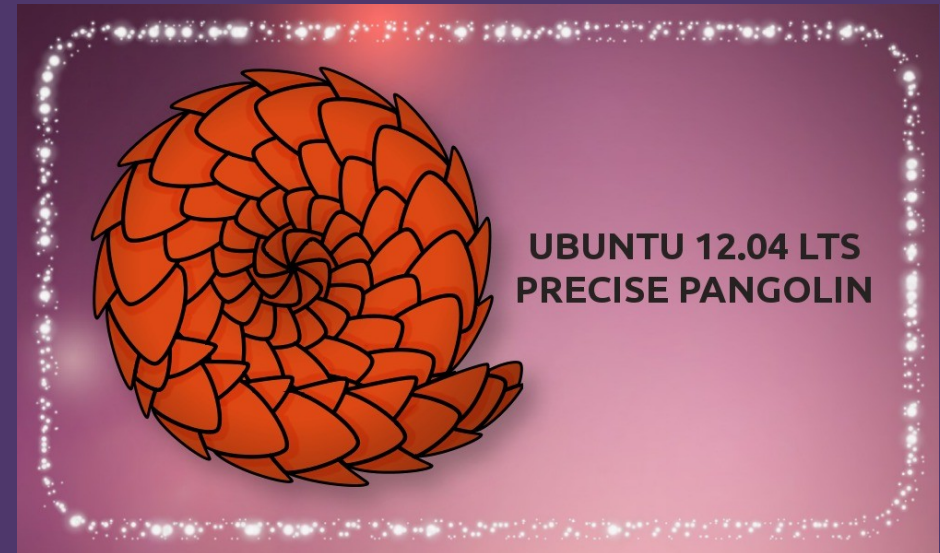
Practice At Home with a VM

<http://www.VirtualBox.org/>

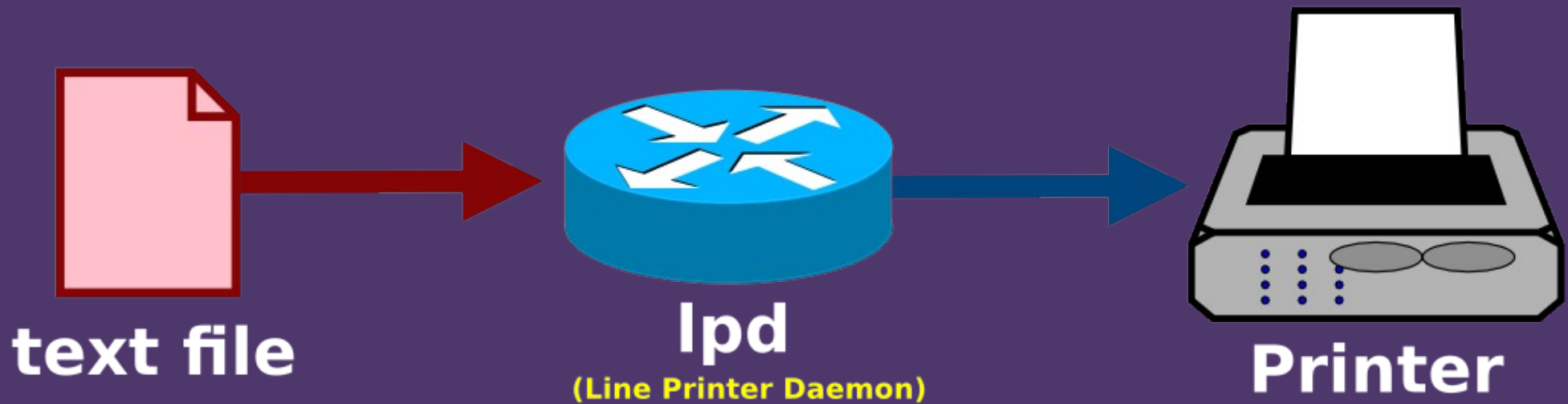


*VirtualBox is free and
available for Windows, Linux, MacOS X*

Launch your Lucid and Precise VM's



Printing



system-config-printer

About system-config-printer

system-config-printer 1.3.7

A CUPS configuration tool.

Copyright © 2006-2008 Red Hat, Inc.

<http://cyberelk.net/tim/software/system-config-printer/>



Credits

License



Close

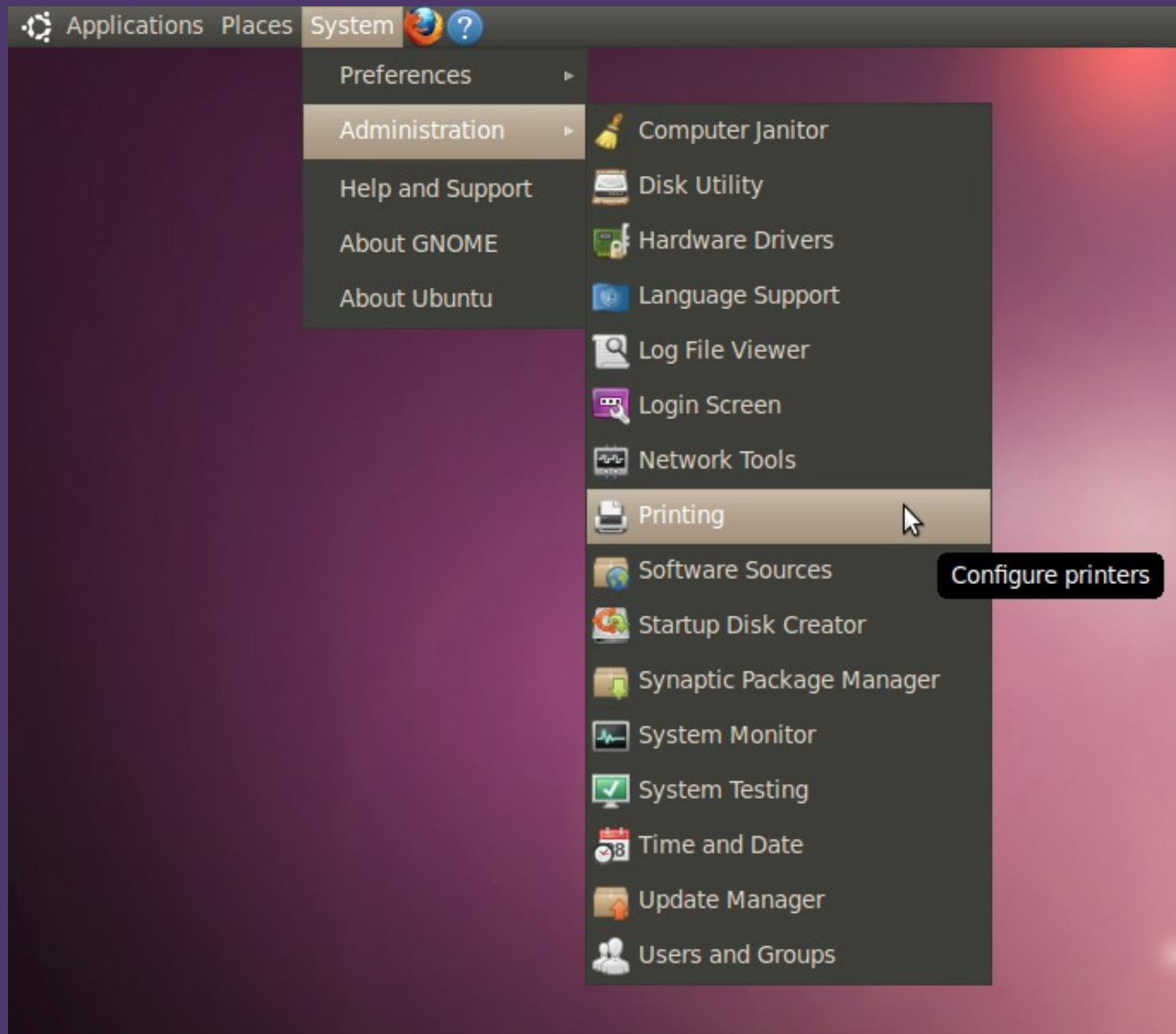
CentOS

devon@t510-dhubner:~

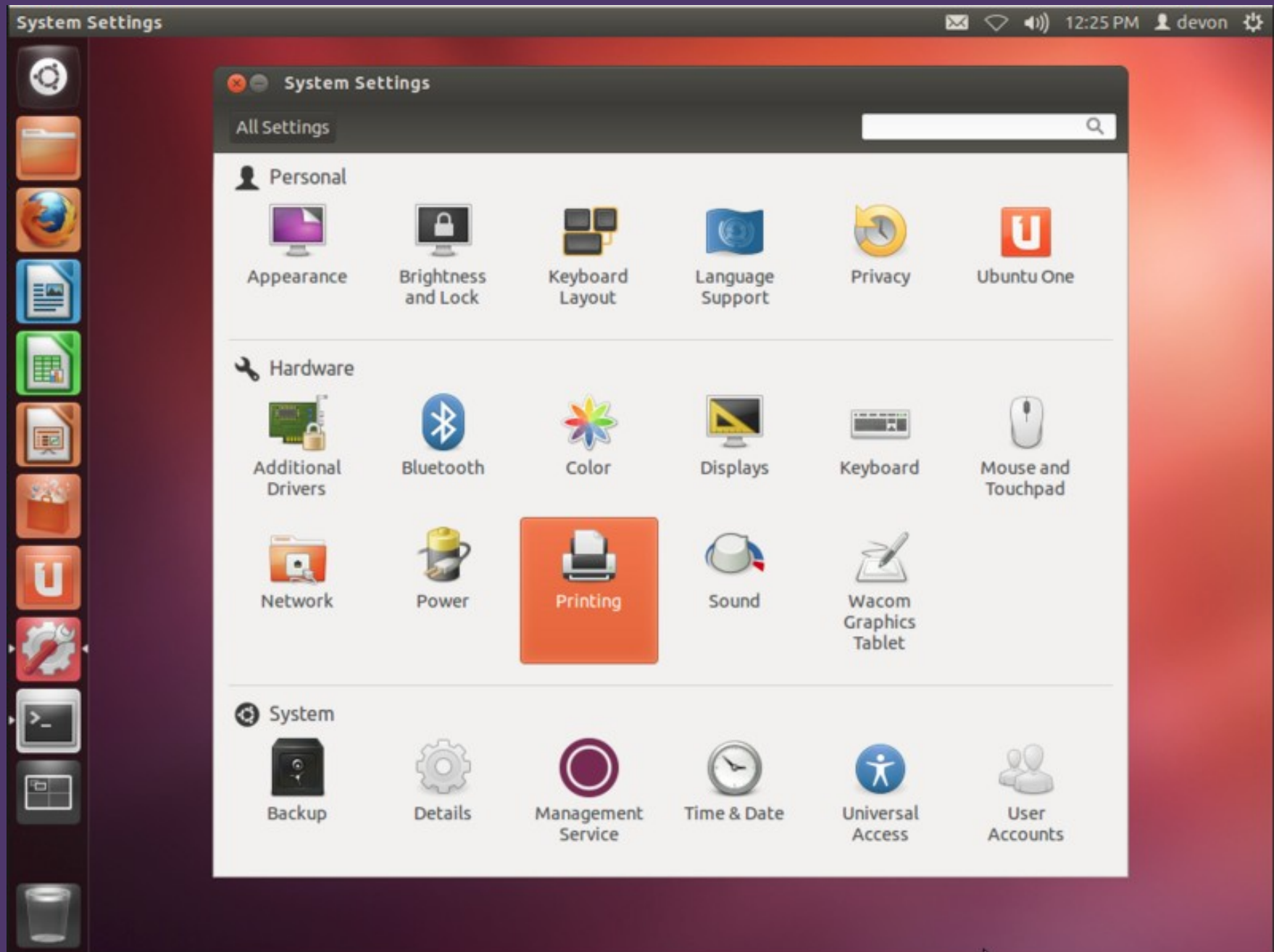
File Edit View Search Terminal Help

(14:35:30) [devon@t510-dhubner:~] system-config-printer

Lucid



Precise



Printing - localhost

Server Printer View Help

+ Add ▼



Filter:



There are no printers configured yet.

+ Add

Connected to localhost

New Printer

Select Device

Devices

Enter URI

▼ Network Printer

Find Network Printer

Internet Printing Protocol

AppSocket/HP JetDirect

Internet Printing Protocol

Internet Printing Protocol

LPD/LPR Host or Printer

Windows Printer via SAMBA

Location of the network printer

Host:

Port number:

9100



Cancel



Forward

Enable Web Admin Support

/etc/cups/cupsd.conf

SystemGroup sys root wheel lp lpadmin devon

WebInterface Yes

Listen *:631

Listen /var/run/cups/cups.sock

<Location />

Order allow,deny

Allow 192.168.0.0/16

Allow 127.0.0.1

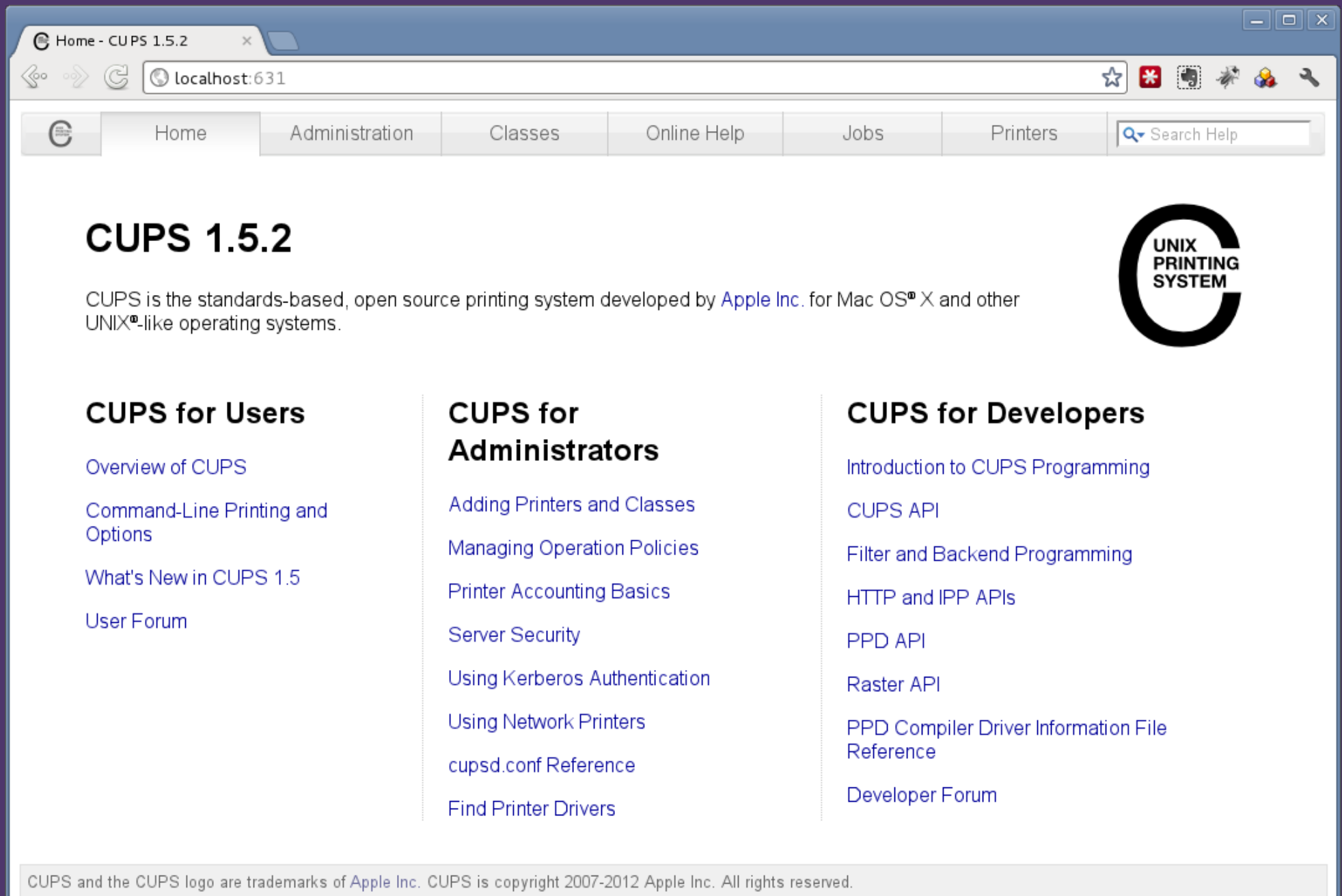
</Location>

Restart the CUPS daemon

sudo su -

service cups restart

<http://localhost:631/>



The screenshot shows a web browser window with the title "Home - CUPS 1.5.2". The address bar shows "localhost:631". The browser's navigation bar includes a CUPS logo, a "Home" button, and tabs for "Administration", "Classes", "Online Help", "Jobs", and "Printers". A search bar labeled "Search Help" is on the right. The main content area has a large heading "CUPS 1.5.2" and a paragraph describing CUPS as a standards-based, open source printing system developed by Apple Inc. for Mac OS X and other UNIX-like operating systems. To the right of this text is the CUPS logo, which is a large "C" with "UNIX PRINTING SYSTEM" inside. Below the main text, there are three columns of links. The first column, "CUPS for Users", includes links for "Overview of CUPS", "Command-Line Printing and Options", "What's New in CUPS 1.5", and "User Forum". The second column, "CUPS for Administrators", includes links for "Adding Printers and Classes", "Managing Operation Policies", "Printer Accounting Basics", "Server Security", "Using Kerberos Authentication", "Using Network Printers", "cupsd.conf Reference", and "Find Printer Drivers". The third column, "CUPS for Developers", includes links for "Introduction to CUPS Programming", "CUPS API", "Filter and Backend Programming", "HTTP and IPP APIs", "PPD API", "Raster API", "PPD Compiler Driver Information File Reference", and "Developer Forum". At the bottom of the page, a footer states: "CUPS and the CUPS logo are trademarks of Apple Inc. CUPS is copyright 2007-2012 Apple Inc. All rights reserved."


Home - CUPS 1.5.2

localhost:631

Home Administration Classes Online Help Jobs Printers Search Help

CUPS 1.5.2

CUPS is the standards-based, open source printing system developed by [Apple Inc.](#) for Mac OS[®] X and other UNIX[®]-like operating systems.



CUPS for Users

- [Overview of CUPS](#)
- [Command-Line Printing and Options](#)
- [What's New in CUPS 1.5](#)
- [User Forum](#)

CUPS for Administrators

- [Adding Printers and Classes](#)
- [Managing Operation Policies](#)
- [Printer Accounting Basics](#)
- [Server Security](#)
- [Using Kerberos Authentication](#)
- [Using Network Printers](#)
- [cupsd.conf Reference](#)
- [Find Printer Drivers](#)

CUPS for Developers

- [Introduction to CUPS Programming](#)
- [CUPS API](#)
- [Filter and Backend Programming](#)
- [HTTP and IPP APIs](#)
- [PPD API](#)
- [Raster API](#)
- [PPD Compiler Driver Information File Reference](#)
- [Developer Forum](#)

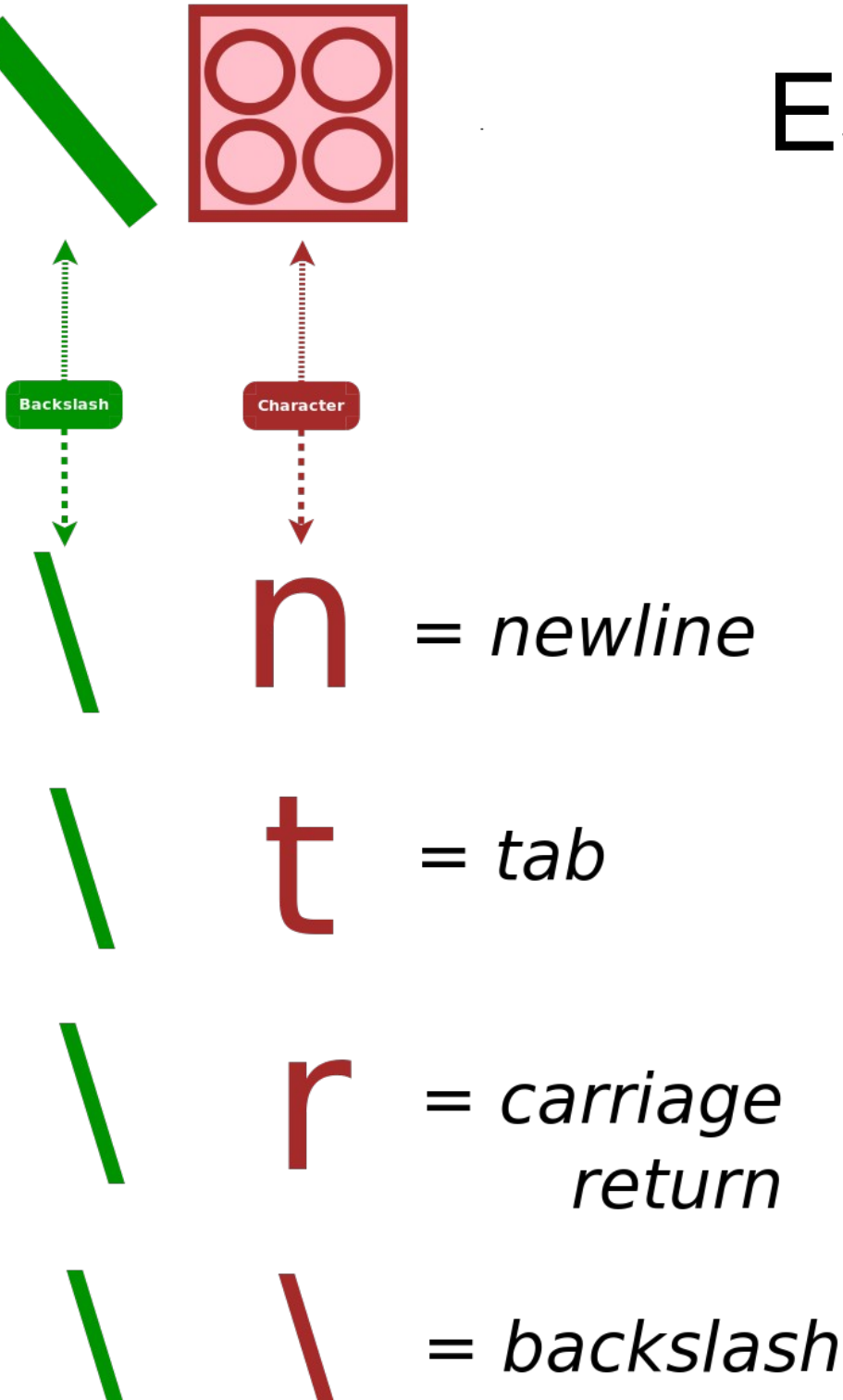
CUPS and the CUPS logo are trademarks of [Apple Inc.](#) CUPS is copyright 2007-2012 Apple Inc. All rights reserved.

Change your Shell prompt

```
PS1=">"
```

```
PS1="This is my super  
prompt > "
```

Escape Characters



`\u` = username
`\H` = hostname
`\t` = time

Echo Escape Characters

echo “\n\nFaust\n\n”

echo -e “\n\nFaust\n\n”

Change your Shell prompt

```
PS1="\u@\H > "
```

```
PS1="\t \u@\H > "
```

A Hint of Color

```
devon@t510-dhubner:~  
devon@t510-dhubner:~ 107x18  
[AWS = desknet] (15:23:34) [devon@t510-dhubner:~] whoami  
devon  
[AWS = desknet] (15:23:42) [devon@t510-dhubner:~] □
```

Colorize your Shell prompt

```
PS1="[\e[32;1m\]lw> \
```

```
[\e[0m\]"
```

```
PS1="[\e[36;1m\]lu@\  
[\e[32;1m\]H> \[\e[0m\]"
```

Echo Colors

```
export NORMAL="\e[0m"  
export GREY="\e[30;1m"  
export RED="\e[31;1m"  
export GREEN="\e[32;1m"  
export YELLOW="\e[33;1m"  
export BLUE="\e[34;1m"  
export PURPLE="\e[35;1m"  
export CYAN="\e[36;1m"  
export WHITE="\e[37;1m"
```

The Colored Penguin

```
      a8888b.
      d888888b.
      8P"YP"Y88
      8|o||o|88
      8'      .88
      8  _ _  Y8.
        d/      8b.
        .dP      Y8b.
        d8:      ::88b.
        d8      Y88b
        :8P      :888
        8a.      :      a88P
        _ _/ Yaa_ :      . | 88P |
        \      YP      | 8P
        /      \      .d|
        - - . _ _ ) 888888P . _ .
```

.o88b.	d8888b.	d888888b	.d888b.	.d88b.	.d88.
d8P Y8	88 8D	~~88~~'	VP 8D	.8P 88.	VP88
8P	88oodD	88	odD	88 d 88	88'
8b	88	88	.88'	88 d 88	.88'
Y8b d8	88	88	j88.	88 d8	j88.
Y88P 88		YP	888888D	Y88P	88888D

The Colored CMCC + CPT201

```

*****      *****      *****      *****      *****
**//**//**//**//**//**//**//**//**//**//**//**//**//
**      //  **//**//**//**//**//**//**//**//**//**//
//**      //**//**//**//**//**//**//**//**//**//
//**      //**//**//**//**//**//**//**//**//**//
//**//**      **//**//**//**//**//**//**//**//**//
//**//**//**//**//**//**//**//**//**//**//**//**//
//**//**//**//**//**//**//**//**//**//**//**//**//

```

[illegible]



Colorize the Penguin and the CMCC

```

a8888b.
d888888b.
8P"YP"Y88
8|o||o|88
8'      88
8  _  Y8.
      d/      8b.      .o88b. d8888b. d888888b .d888b. .d88b. .d88.
      dP      Y8b.      d8P Y8 88 8D  ~~88~~ VP 8D .8P 88. VP88
d8: '      :88b.      8P 88oodD 88      odD 88 d 88 88'
d8      Y88b      8b 88      88      .88' 88 d 88 .88'
:8P      :888      Y8b d8 88      88      j88. 88 d8 j88.
8a.      a88P      Y88P 88      YP      888888D Y88P 88888D
      Yaa_ :      88P|
      YP_      8P
      )888888P

```

http://192.168.7.7/penguin.txt
http://192.168.7.7/cmcc.txt

Any *backslash* (**) will need to be “*escaped*” like: **

```
mv penguin.txt
penguin.sh
chmod +x
penguin.sh
./penguin.sh
```

```

*****  *****  *****  *****  *****
** /// ** /** **  ** /**  ** /// **  ** /// **
**      // /** /** ** ** /** **      //  **      //
/**      /** //***  /** /**      /**
/**      /** /**  /** **      /**
//**      **/**  //  /** /** **      ** /**      **
//***** /**      /** //*****  /*******
/////  //      //  /////  /////

```

[illegible]



Colorize the Penguin and the CMCC

```
wget http://192.168.7.7/penguin.txt  
wget http://192.168.7.7/cmcc.txt
```

```
mv penguin.txt penguin.sh
```

```
chmod +x penguin.sh
```

```
./penguin.sh
```

Homework

- http://cpt201.hubner.org/wiki/CPT-201_Fall_2012_Homework#Class_7_-_2012.10.10
- Please answer **all** the questions.
- Answers are due by the start of **class 9** on **October 24th**.
- You can try out these commands at home using a **LiveCD** like the **System Rescue CD**. You may also burn one of the other LiveCD's available, like **Tails**.